

## PHEASANT SURVEYS IN PAKISTAN<sup>1</sup>

Z. B. MIRZA<sup>2</sup>, ABDUL ALEEM<sup>3</sup>, AND M. ASGHAR<sup>4</sup>

All the five species of Pheasants of Pakistan are getting rare year by year mainly because of poaching and destruction of their habitat. Their range of occurrence is shrinking. Some of these have become so rare that they are considered threatened with extinction and are registered in IUCN Red Data Book. These are:

1. Western Horned Tragopan *Tragopan melanocephalus* once occurred in Indus Kohistan, District Swat, in Hazara Kohistan and Kaghan Valley, District Hazara and in Azad Kashmir mainly in Neelum Valley.

2. Cheer Pheasant *Catreus wallichii* was once common in foot hills of NWFP, Punjab and Azad Kashmir.

The other three species are Monal *Lophophorus impejanus* which occurred in Safed Koh mountains of NWFP, in Swat, Gilgit, District Hazara including Gallies and Azad Kashmir. White Crested Kalij *Lophura leucomelana* in Swat, District Hazara in Kaghan Valley and Gallies, District Rawalpindi in Murree foot hills and Margala hills and in Azad Kashmir and the Koklas *Pucrasia macrolopha* found on forested slopes of mountains of Chitral, Dir, Swat, Hazara, Rawalpindi and Azad Kashmir.

Very little information is available regarding the status of these species. There is no basis to designate the status of any of these species except some published accounts (Roberts 1970, Mirza 1971, Wayre 1971 and Khan 1976).

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<sup>2,4</sup> World Wildlife Fund Pakistan, P.O. Box 1312, Lahore, Pakistan.

<sup>3</sup> Pakistan Forest Institute, Peshwar, Pakistan.

<sup>5</sup> World Wildlife Fund Pakistan/World Pheasant Association Pakistan.

In May and August, 1977 WWFP/WPA<sup>5</sup> organized the first systematic survey of habitat and population of Pheasants.

### HABITAT DESCRIPTION

**Neelum Valley:** Kuttan forest, Salkhala Game Reserve and Machyara Game Reserve are most suitable habitats for Koklas, Monal and Western Horned Tragopan. The elevation varies between 1500 to 4500 metres. These are thickly forested, with sparse to thick undergrowth. The forests are in a transition zone between moist temperate and dry temperate and show the mixed characteristics. Koklas and Monal Pheasants were observed to prefer dense forests with plenty of undergrowth, where they could roost at night on the trees and find shelter in the undergrowth during day time. Monal were also seen inhabiting alpine zone just above the tree line or in some areas where birch trees grow.

Tragopan were found occupying steep hill slopes with some vegetation where there were not much chances of disturbance of any sort. However, in August these were seen also on gentle slopes with thick vegetation.

**Hazara:** Parts of Kaghan Valley (Shogran, Malakandi, Manshi and Gallies), Dunga Gali Pipe Line Forests, Retli, Darwaza Forest, were also visited. The areas are suitable for Koklas. The forests are moist temperate type.

The main tree species in Kaghan (the parts visited) is blue pine (*Pinus wallichiana*) occurring equally mixed with deodar *Cedrus deodara* in Shogran and Malakandi forest. In Gallies forests, fir (*Abies pindrow*) and spruce

(*Picea smithiana*) are the predominant species, whereas blue pine forms a major part of the mixture on elevations lower than 2500 m. *Quercus dilatata* and *Quercus semicarpifolia* are found here.

The forests are moist temperate. Deodar (only in Malakandi forests) and blue pine are the dominant species whereas fir and spruce are mixed along with it in smaller proportions.

Thick bushy cover provided shelter for the Pheasants and trees over them for roosting.

**Gallies:** The forests are moist temperate. Fir and spruce are the dominant species on higher elevations whereas blue pine is associated as a co-dominant (dominant on lower elevations).

Lower elevations is Gallies forests are the habitat for Kalij Pheasant. Thick shrubby growth of *Myrsine africana*, *Rosa macrophylla*, *R. moschata* and *Berberis lycium* offers maximum protection to the bird.

#### SURVEYS

##### *Koklas Census:*

The census of this Pheasant was carried out from 4th to 23rd May, 1977 in some areas of Kaghan Valley, Gallies and Neelam Valley and again from 13th August to 23rd August, 1977 in Neelam Valley. The bird occurs at elevations between 1600-2800 m. In May and August it was recorded as high as 2900 m. It prefers moist temperate coniferous forests with shrubby undergrowth, spending the whole day feeding and hiding in the shrubs and roosting on trees at night. In May these birds start calling in the morning, just before dawn, 20 to 30 minutes before alighting from trees and then for about another one hour they keep calling from ground. The first call was heard at 4.30 a.m. in May. However, in August the first call was recorded at 5.00 a.m. The intensity of calls was comparatively less. The population was estimated by listening to the morn-

ing calls only for 20 minutes after the first call because when the birds alight from trees they change their positions and the new calls are most likely to be confused as coming from new birds. The position of each member of the team for listening to the calls was predetermined during the reconnaissance survey which was done one day before for each area. Elevation of each person's position was also recorded by altimeters during the preliminary surveys. This enabled each person to estimate approximate elevation of each calling bird. Each person also made a sketch map of the area where he was listening to the calls and plotted the approximate position of each calling bird on the sketch map. After listening to the calls the members of the team with adjacent positions compared the marked positions of the calling birds on their sketch maps and eliminated the common counts.

In Kaghan Valley 200 calling birds were counted in 16½ sq. mile areas; Shogran 105 birds in 9 sq. mile area; Malakandi 33 birds in 4½ sq. mile area and Manshi 62 birds in 3 sq. mile area.

Similarly in Gallies 88 calling birds were counted in 6½ sq. mile area; Retli, Dungagali Pipeline Forest and Darwaza forest.

In Neelam Valley there were 100 calling birds in 22 sq. mile area in May 1977; Salkhala 60 birds in 12 sq. mile area and in Kuttan 40 birds in 10 sq. mile area. In this area the teams were concentrating more on Tragopan count and Koklas count was not as thorough as in other areas. The calls were estimated from higher elevation comparative to the range of occurrence of Koklas Pheasant at that time of the year. In August the counting was exclusively for Koklas in Machyara area where 538 calling birds were counted in 20 sq. mile area.

*Monal Estimate:*

In May 1977 some Monals were heard calling in the morning and some were flushed with the help of a dog at elevation 2450 - 3200 m. in Kuttan and Salkhala areas. Only 41 Monals could be listened or flushed in 16 sq. mile area. The calls of the Monal is less audible from distance as compared to Koklas Pheasant. Since the terrain in which it occurs is very difficult, therefore, call method estimate of population was found to be impossible by the members of the team. Although attempts were made but much of the area remained uncovered. Only 10 calling birds were heard in Salkhala and 15 calling birds were heard in Kuttan.

Attempts were made to flush the birds with the help of a dog but that method was also impossible for several areas. In order to get some idea of the population of this bird this method was adopted on some comparatively easy slopes. 8 males and 5 females were flushed in Salkhala and 7 males and 3 females were flushed in Kuttan area. In August 1977 in Machyara Game Reserve area estimate of Monal population was made by listening to the calls of the males, by beating some areas with the help of beaters and also by chance sighting of some birds in the range of their occurrence which was at that time of the year between 2875 to 3800 m. high. The topographical features of this area are more gentle slopes, some plateaus, few steep hills and very few precipitous cliffs, therefore, it was possible for some members of the team to get better idea of these birds. 50 calling birds were recorded, 6 males and 2 females were flushed and 2 males and one female were just sighted on steep floor of the forest in a 13 sq. mile area. It was observed that Monal also occur on very gentle slopes. Their main concentration, however, was on steep and precipitous cliffs. We

now believe that steep and precipitous hill slopes are not the particular habitat criteria of this Pheasant. Occurrence in such area is perhaps their adaptation for survival from their enemies, of which the man is the worst. To further endorse our view we refer to Roberts (1970) who recorded "in early 1950s in gullies the Monal was regularly seen and shot in Mukshpuri hills, but according to the local people it had not been seen there for the last 8 or 9 years". Mukshpuri hills 2875 m has gentle slopes all around and the eradication of Monal from this area is due to man's action.

*Western Horned Tragopan Count:*

Philip Wayre 1971 could only get indirect evidence of occurrence of this Pheasant in Kaghan Valley. During our census of Koklas no evidence of its occurrence in Kaghan Valley could be obtained. Although two years ago a male Tragopan was obtained by NWFP Wildlife Department for captive breeding of this species. This specimen was reportedly collected from Bichela Valley. This valley is adjacent to sub valley in Azad Kashmir where the bird is still thriving. It is also likely that this bird was actually trapped from across the border in Azad Kashmir. Robert 1970 reports the obtaining of a skin allegedly killed in Murree hills. He states "occasional birds wander in winter in the Murree hills and are shot there". But on the basis of present position of this bird in Azad Kashmir, it appears unlikely.

Tragopan is still common in Azad Kashmir in some pockets. In May 1977 its counting was attempted by call method as well as by flush method in Salkhala and Kuttan Game Reserves and again in August 1977 in Machyara, Neelam Valley, Azad Kashmir.

In Salkhala mainly around Charehan 12 calling males were recorded at an elevation 3000 to 3175 m. With the help of beaters 2 males



and 4 females were flushed. All these 18 birds were recorded in 12 sq. mile area. In Kuttan Game Reserve 9 birds were recorded by call method and 7 males and 4 females were flushed with the help of a dog in 10 sq. mile area. Due to the very difficult terrain it was impossible to survey the area thoroughly and totally. Therefore, we believe the population of this bird in these areas is much more higher than the figures given by us. Another reason for this indication of higher population is that in the month of May the breeding season had commenced and as we feel the females have the tendency to remain inconspicuously hidden in sheltered places, whereas the males usually easily flush out, probably to divert the attention of the intruders.

In Machyara, in August 1977, a total of 7 males and 6 females were sighted by beat method. Out of these 1 male in full plumage, 2 young males and 3 females were sighted together on almost horizontal slope of a hill covered with thick *Quercus* forest at an elevation 2825 m. In the total area of 20 sq. miles all these birds were found in one patch of 3 sq. miles *Quercus* forest. In Machyara our census was more thorough because of comparatively easy terrain. Tragopan has the tendency to live in undisturbed areas even if it is a plateau. However, apparently because of great disturbance due to heavy human population this bird mainly survives in the most difficult terrain.

#### *Red Jungle Fowl—An erroneous record:*

Red Jungle Fowl *Gallus gallus* was reported to occur in the Margala hills by the Wildlife Enquiry Committee. Khan (1976) reported 573 Red Jungle Fowl in District Hazara. This species was also reported by various other authors (Ripley 1961), Ali (1962), Siddiqui (1969) and Newland (1973). Roberts (1970) reported

that White Crested Kalij was mistaken as Red Jungle Fowl by Wildlife Enquiry Committee which compiled its report perhaps on the basis of the information obtained from local people who call the White Crested Kalij as Jungli Murghi (Wild Fowl). We did survey in the Gallies exactly in the same areas where Khan (1976) counted Red Jungle Fowl. It was revealed that he also repeated the mistake of Wildlife Enquiry Committee. We, therefore, report the non-occurrence of Red Jungle Fowl atleast in Gallies.

#### *Cheer Pheasant:*

In August 1977 two members of our team Mr. A. Qaddus and Mr. Sharif reported hearing the calls of Cheer Pheasant in Machyara area at elevation about 2450 m. This bird is known as "Rayar" in Azad Kashmir and is still reported from various areas in Neelam Valley and other valleys of Azad Kashmir and even near Muzaffarabad. Its census was not attempted for the time being. It has not been reported in recent years from anywhere in Pakistan.

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REFERENCES

ALI, SALIM AND RIPLEY, S. DILLON (1962): Handbook of the birds of India and Pakistan. Oxford University Press, Bombay.

KHAN, YAR MUHAMMAD (1976): Wildlife Population Census of NWFP January-July, 1976. NWFP Wildlife Department report.

MIRZA, Z. B. (1971): Note on the distribution and status of Western Horned Tragopan in Azad Kashmir. Pheasant Trust, Annual report.

NEWLAND, A. WILLIAM (1973): Proposal for the Conservation of Himalayan Game Birds submitted to WWF.

RIPLEY, SIDNEY DILLON (1961): A synopsis of the birds of India and Pakistan together with those of Nepal, Sikkim, Bhutan and Ceylon. Bombay Natural History Society, India.

ROBERTS, T. J. (1970): A note on the Pheasants of West Pakistan. *Pakistan J. For.* 20(4):319-326.

SIDDIQUI, M. SIFAT ULLAH (1969): Fauna of Pakistan. Agricultural Research Council, Government of Pakistan, Block 79, Pakistan Secretariat, Karachi.

WAYRE, PHILIP (1971): Advisery report on the Pheasants in Kaghan Valley with particular reference to Western Horned Tragopan, submitted to WWFP.